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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,445	10/09/2003	Takayoshi Otomo	TSL - 1714CIPUS	9801
8131	7590	06/29/2005	EXAMINER	
MCKELLAR IP LAW, PLLC 784 SOUTH POSEYVILLE ROAD MIDLAND, MI 48640			ROBERTSON, JEFFREY	
			ART UNIT	PAPER NUMBER
			1712	
DATE MAILED: 06/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/682,445

Applicant(s)

OTOMO, TAKAYOSHI

Examiner

Jeffrey B. Robertson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/114,374.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kilgour et al. (U.S. Patent No. 5,760,116).

For claim 1, in column 2 line 44 through column 3, line 34, Kilgour teaches a silicone gel composition containing a linear alkenyl stopped polyorganosiloxane, a hydrogen containing polysiloxane, and silicone. In column 6, lines 54-59, Kilgour

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teaches that the hydrosilylation is carried out in the presence of a platinum group catalyst. In column 9, lines 6-12, Kilgour teaches that 250 g (100 parts by weight) of a divinyl-terminated polysiloxane is used along with 650 g (260 parts by weight) of a silicone is used. In column 9, lines 35-60, in Table 1, Kilgour teaches SiH to Si-vinyl ratios that fall within the range claimed by applicant is claim 1. For claim 3, in column 9, lines 19-23, Kilgour teaches a divinylsiloxane that is a dimethyl-alkenyl endblocked dimethyl polysiloxane corresponding to applicant's i in claim 3. For claim 4, in column 6, lines 31-51, Kilgour teaches an organopolysiloxane of applicant's formula v, where R<sup>11</sup> is most preferably methyl. For claim 5, in column 7, lines 1-24, and column 3, lines 60-66, Kilgour teaches a linear silicone fluid where the substituents on the fluid are most preferably methyl, which results in a trimethylsiloxy-endblocked dimethylpolysiloxane.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (U.S. Patent No. 5,770,298) in view of Ota et al. (U.S. Patent No. 5,950,061).

For claim 1, in column 2, lines 51-67, Nakamura teaches a silicone gel composition containing an alkenyl-substituted organopolysiloxane having at least two

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alkenyl groups per molecule, an organohydrogenpolysiloxane having at least two silicon-bonded hydrogen atoms per molecule, and a sufficient amount of platinum catalyst to cure the composition. For claim 2, in column 6, line 57 through column 7, line 8, Nakamura discloses that the composition may also contain 5-500 parts of silica filler per 100 parts of the alkenyl-substituted polyorganosiloxane component, which significantly overlaps the range set forth by applicant. For claim 3, in column 3, line 41 through claim 4, line 28, Nakamura sets forth polymers that may be used as the alkenyl-substituted organopolysiloxane, including dimethylsiloxane/methylvinylsiloxane copolymers that are end-blocked with trimethylsiloxy groups. These copolymers correspond to the copolymers set forth in (iii) of claim 3. For claim 4, in column 4, line 59 through column 5, line 25, Nakamura teaches that the organohydrogenpolysiloxanes are dimethylsiloxane-methylhydrogensiloxane copolymers where the chain terminals are blocked with trimethylsiloxy groups, corresponding to the copolymers set forth in (iii) of claim 4. For claims 1 and 5, in column 5, line 60 through column 6, line 42, Nakamura discloses that a diorganopolysiloxane free of alkenyl and silicon-bonded hydrogen groups is added in an amount of 5-200 parts per weight per 100 parts by weight of the alkenyl-substituted organopolysiloxane. Here, for claim 5, Nakamura teaches that this diorganopolysiloxane is a dimethylpolysiloxane that is endblocked with trimethylsiloxy groups.

Regarding the range limitation for component C of claim 1, it is noted that applicant's claim is directed to ranges of "greater than 200" parts by weight, while Nakamura teaches from 5 to 200 parts by weight. The examiner's position is that one of

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ordinary skill in the art would not have expected a composition containing 200.0000001 parts by weight of component C to perform differently than a composition containing 200 parts by weight of component C. Although Nakamura teaches that the diorganopolysiloxane *may* bleed when exceeding 200 parts by weight in column 6, lines 40-42, the examiner's position is that bleeding would not necessarily occur.

Furthermore, at ranges extremely close to 200 parts by weight as set forth above, such bleeding would not be expected to occur. Therefore it would have been obvious to one of ordinary skill in the art to use amounts that slightly exceed 200 parts by weight depending on the desired durometer and penetration characteristics of the resulting composition. A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

For claim 7, in column 6, lines 56-61, Nakamura teaches that the gel is molded.

For claim 6, in Example 4, Nakamura teaches that alkenyl-substituted polyorganosiloxane is mixed with filler thus forming applicant's gel base. To this is added the organohydrogenpolysiloxane, platinum catalyst, and trimethylsiloxy end-blocked dimethylpolysiloxane.

Although Nakamura teaches a low durometer fixing roll, Nakamura fails to teach that the Asker C hardness is from 1 to 30 °.

Ota teaches fixing rollers with a silicone intermediate layer in column 3, lines 35-48, and Figure 3. Ota teaches in column 5, lines 50-55 and column 6, lines 20-27 that

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the Asker C hardness of the fixing layer be 1-30° to enhance the fixing efficiency of the toner image on paper.

Nakamura and Ota are analogous art in that they both teach fixing rollers containing intermediate layers of silicone. It would have been obvious to one of ordinary skill in the art at the time of the invention to formulate the gel of Nakamura so that the Asker C hardness would be between 1-30°. The motivation would have been that Ota teaches that intermediate silicone layers with this hardness enhance the fixing efficiency of the toner image on the paper. One of ordinary skill in the art, seeking to improve the fixing efficiency would have formulated the gel of Nakamura within the specified hardness range to achieve this improvement.

### ***Conclusion***

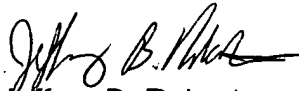
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sanders et al. (U.S. Patent No. 6,770,326) and Narayan et al. (U.S. Patent No. 6,902,688) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey B. Robertson  
Primary Examiner  
Art Unit 1712

JBR